Configuration wizard

WRS-K
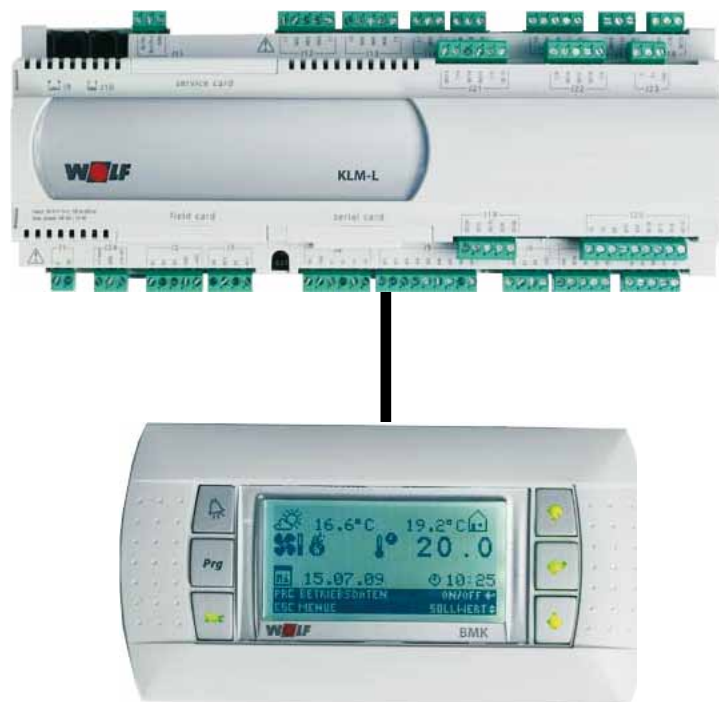
Valid for software version 2.1.024 or higher

Contents

1. Commissioning

- According to DIN EN 50110-1, only qualified electricians may carry out the installation and commissioning of the ventilation control unit and connected accessories.

- Observe all regulations stipulated by your local power supply utility and all VDE or local regulations.

- DIN VDE 0100 regulations regarding the installation of high voltage systems up to 1000 V.

- DIN VDE 0105-100 operation of electrical systems.

- Only original Wolf accessories may be used (electric heater bank, condensate pump, servomotors, etc.), otherwise, Wolf cannot provide a warranty.

Operating overview

1	Displaying and acknowledging active fault messages
2	Displaying the system operating data (set / actual values)
3	Access to the main menu
4	Forward scrolling within a menu and increasing values
5	Switching the system on and off, selecting menu points, confirming inputs
6	Backwards scrolling within a menu and reducing values

2. When retrofitting an air quality sensor (mixed gas or VOC,CO$_2$) follow the instructions below.
Please press **Prg** and *Esc* for approx. 2 sec. and enter manufacturer password 4711.

Configuration

```
        Configuration

Manufacturer password

                    4711
```

Select Inputs/outputs with ↑↓ and confirm with Enter ↵

```
⬍ Inputs/outputs          ↵
  System parameters
  Alarm management
```

Select Analogue inputs with ↑↓ and confirm with Enter ↵

```
        Manufacturer menu

  Digital inputs
⬍ Analogue inputs         ↵
  Digital outputs
  Analogue outputs
```

Select Air quality sensor with ↑↓ and confirm with Enter ↵

```
        Configuration      15
        Analogue inputs

Air quality sensor
B--
Type 0-10 V

ESC CANCEL  ↵ SAVE    VALUE ⬍
```

Enter B08 with ↑↓ and confirm with ↵, type 0-10 V, confirm with Enter ↵

```
        Configuration      15
        Analogue inputs

Air quality sensor
B08 KLM-M/L
Type 0-10 V

ESC CANCEL  ↵ SAVE    VALUE ⬍
```

The input has been configured
Hold down *Esc* button until you jump to the standard screen

Activation

```
☀ 11.4°C        18.5°C 🏠

🌀 🔥        ⏲ 21.0

FR 20.03.09        ⏲ 11:02
PRG OPERATING DATA    ON/OFF ↵
ESC MENUS         SET VALUE ⬍
```

Press *Esc* button

```
        Main menus

  Standard settings
⬍ Displays                ↵
  Time functions
  Heating contractor
ESC BACK  ↵ SELECTION  DISPLAYS ⬍
```
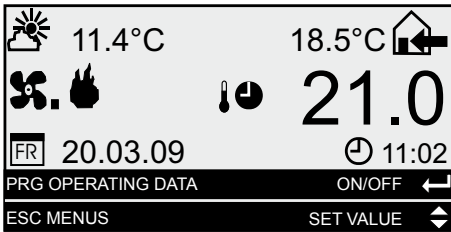
Select Standard settings with ↑↓ and confirm with Enter ↵

Select Air quality control with ↑↓ and set to Yes with Enter ↵
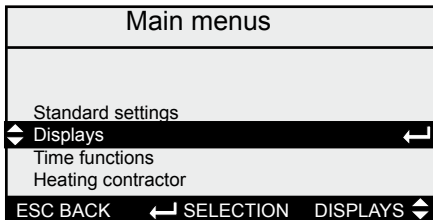
```
Standard setting        GE-26

Air quality control active

    ☐         (No)

ESC BACK  ↵ SELECTION  DISPLAYS ⬍
```

Control is enabled
Hold down *Esc* button until you jump to the standard screen

3. When retrofitting a remote control, follow the instructions below.

```
┌─────────────────────────────────────┐
│ ☼  11.4°C          18.5°C  🏠←       │
│                                      │
│ ❄.🔥        ┃●    21.0              │
│                                      │
│ FR  20.03.09         ⏱ 11:02        │
├─────────────────────────────────────┤
│ PRG OPERATING DATA      ON/OFF   ↵   │
├─────────────────────────────────────┤
│ ESC MENUS              SET VALUE ↕   │
└─────────────────────────────────────┘
```

Press *Esc* button

```
┌─────────────────────────────────────┐
│            Main menus                │
│                                      │
│                                      │
│    Standard settings                 │
│ ↕  Displays                     ↵   │
│    Time functions                    │
│    Heating contractor                │
├─────────────────────────────────────┤
│ ESC BACK      ↵ SELECTION  DISPLAYS ↕│
└─────────────────────────────────────┘
```

Select Heating contractor with ↑↓ and confirm with Enter ↩

```
┌─────────────────────────────────────┐
│                                      │
│            ██  ██                    │
│          WOLF                        │
│       wolf-heiztechnik.de            │
│                                      │
└─────────────────────────────────────┘
```

Continue with ↩

```
┌─────────────────────────────────────┐
│ Heating contractor                   │
│ ⚒                                    │
│         Password: 1234               │
│                                      │
│                                      │
└─────────────────────────────────────┘
```
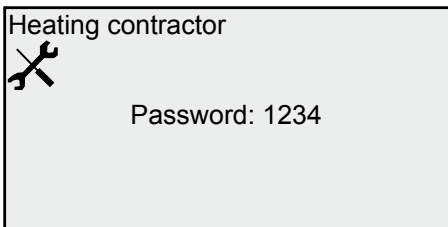
Select 1234 with ↑↓ and confirm with Enter ↩

```
┌─────────────────────────────────┐
│    Heating contractor - menus   │
├─────────────────────────────────┤
│                                 │
│   Alarm management              │
│   Service                       │
│ ⬍ Other                       ↵ │
│   Night ventilation             │
│   Limits                        │
├─────────────────────────────────┤
│ ESC BACK    ↵ SELECTION  DISPLAY⬍│
└─────────────────────────────────┘
```

Select Other with ↑↓ and confirm with
Enter ↵

```
┌─────────────────────────────────┐
│ Other...                  S-02  │
├─────────────────────────────────┤
│                                 │
│ Remote control                  │
│ installed?             No       │
│                                 │
│                                 │
├─────────────────────────────────┤
│ ESC BACK    ↵ SELECTION  DISPLAY⬍│
└─────────────────────────────────┘
```

Confirm with ↵

```
┌─────────────────────────────────┐
│ Other...                  S-02  │
├─────────────────────────────────┤
│                                 │
│ Remote control                  │
│ installed?             Yes      │
│                                 │
│                                 │
├─────────────────────────────────┤
│ ESC BACK    ↵ SELECTION  DISPLAY⬍│
└─────────────────────────────────┘
```

Select "Yes" with ↑↓ and confirm with
Enter ↵

```
┌─────────────────────────────────┐
│ Configuration             W-E2  │
├─────────────────────────────────┤
│                                 │
│      Restart system             │
│      (mains OFF/ON)             │
│                                 │
│                                 │
├─────────────────────────────────┤
│ System restart                  │
└─────────────────────────────────┘
```

Switch power supply to controller OFF and
ON again
The remote control is enabled

4. When retrofitting a LON / BacNet / ModBus interface, follow the instructions below.
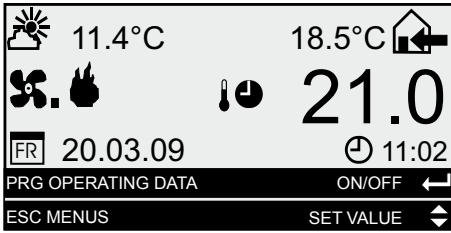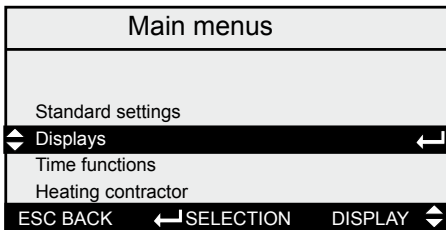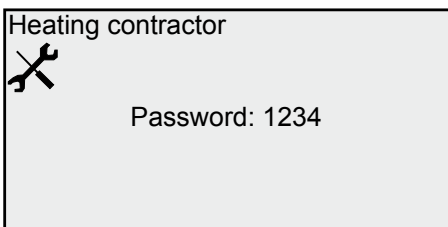
```
☼  11.4°C          18.5°C ⌂
�֍. ♨        ┃●    21.0
FR  20.03.09         ⏱ 11:02
PRG OPERATING DATA      ON/OFF  ⏎
ESC MENUS               SET VALUE ⬍
```

Press *Esc* button

```
              Main menus

      Standard settings
  ⬍   Displays                    ⏎
      Time functions
      Heating contractor
  ESC BACK    ⏎SELECTION   DISPLAY ⬍
```

Select Heating contractor with ↑↓ and
confirm with Enter ⏎

```
              WOLF
         wolf-heiztechnik.de
```

Continue with ⏎

```
Heating contractor
✕

          Password: 1234
```

Select 1234 with ↑↓ and confirm with
Enter ⏎

```
┌─────────────────────────────────────┐
│      Heating contractor - menus      │
├─────────────────────────────────────┤
│   Alarm management                   │
│   Service                            │
│ ⬍ Other                          ↵  │
│   Limits                             │
├─────────────────────────────────────┤
│ ESC BACK   ↵ SELECTION  DISPLAY  ⬍  │
└─────────────────────────────────────┘
```

Select Other with ↑↓ and confirm with
Enter ↵

```
┌─────────────────────────────────────┐
│ Other...                       S-04  │
├─────────────────────────────────────┤
│ BMS protocol                         │
│ >LON-Works                           │
│ Transfer speed                       │
│ >4800 (RS485/RS422)                  │
│ BMS address:              001        │
├─────────────────────────────────────┤
│ ESC CANCEL   ↵ SAVE     VALUE   ⬍   │
└─────────────────────────────────────┘
```

Confirm with ↵

```
┌─────────────────────────────────────┐
│ Other...                       S-05  │
├─────────────────────────────────────┤
│ Protocol type:                       │
│ BacNet                               │
│                                      │
│                                      │
│                                      │
├─────────────────────────────────────┤
│ ESC CANCEL   ↵ SAVE     VALUE   ⬍   │
└─────────────────────────────────────┘
```

Select required connection with ↑↓

- No proto
- pCO Manager
- LON-Works
- Bac-Net
- ModBus Stave Standard

and confirm with Enter ↵

BMS protocol has been set
Hold down *Esc* button until you jump to
the standard screen

The following settings should be made on site for pressure control.

The preset parameter values ensure operation of the system, but have to be matched to customer specifications during commissioning.

Selecting the number of pressure sensors

Standard screen → *Esc* → Select heating contractor → Enter password 1234 → Select pressure/flow rate

Pressure/flow rate ctl   DV1
Diff. pressure sensor
Number   -2-
Type 0/10 V
Range   0/1000 Pa
ESC BACK   ↵ SELECTION   DISPLAY ⬍

Factory setting	Customer setting
Number 2	
Range 1000	

(If only one sensor is selected, the differential of the extract fan can be entered on the next screen: overpressure, 0 - −50%; underpressure 0 - +50%)

Pressure/flow rate ctl   DV2
Diff. extract fan
00.0%
ESC BACK   ↵ SELECTION   DISPLAY ⬍

00.0%	

The following settings for flow rate control have to be carried out on site:
Fan type, k-factor

Druck- / Volumenstrom   DV3
Supply fan
k-Faktor: 0
Fan type: 1
Esc ZURÜCK ↵   AUSWAHL   ANZEIGE ⬍

k-Faktor	0	
Typ	1	

Druck- / Volumenstrom   DV4
Diff. extract fan
k-Faktor: 0
Fan type: 1
Esc ZURÜCK ↵   AUSWAHL   ANZEIGE ⬍

k-Faktor	0	
Typ	1	

The selection formula for the corresponding fan type and the k-factor are indicated on the fan.

select fan type 1 for formula
$$V = k \cdot \sqrt{\triangle p}$$

select fan type 2 for formular
$$V = k \cdot \sqrt{\frac{2}{1{,}2} \cdot \triangle p}$$

Enter set values for automatic mode

Standard screen → *Esc* → Select time functions → Set values → Select pressure control, ventilation air → Enter values → Select pressure control, extract air → Enter values

Set values, time prog
Pressure control, ventilation air
目 00000 Pa   日 00000 Pa
▭ 00000 Pa   ‒ 00000 Pa
ESC BACK   ↵ SELECTION   DISPLAY ↕

	Factory setting	Customer setting
目	800 Pa	
日	600 Pa	
▭	300 Pa	
‒	100 Pa	

or

Factory setting	Customer setting
1300 m³/h	
1100 m³/h	
900 m³/h	
800 m³/h	

Select pressure control, extract air → Enter value

Set values, time prog
Pressure control, extract air
目 00000 Pa   日 00000 Pa
▭ 00000 Pa   ‒ 00000 Pa
ESC BACK   ↵ SELECTION   DISPLAYS ↕

	Factory setting	Customer setting
目	800 Pa	
日	600 Pa	
▭	300 Pa	
‒	100 Pa	

or

Factory setting	Customer setting
1300 m³/h	
1100 m³/h	
900 m³/h	
800 m³/h	

Hold down *Esc* until you jump to the standard screen

Set value for backup mode, heating/cooling
Setting night ventilation and peak ventilation

Standard screen → *Esc* → Select heating contractor → Enter password 1234 → Select backup mode →
Select heating pressure → Enter value

	SB-04
Backup mode	
Heating	
Pressure	
	0000 Pa
ESC BACK ↵ SELECTION DISPLAY ⬍	

Factory setting	Customer setting
800 Pa	

or

800 m³/h	

Select cooling pressure → Enter value → *Esc*

	SB-09
Backup mode	
Cooling	
Pressure	
	0000 Pa
ESC BACK ↵ SELECTION DISPLAY ⬍	

800 Pa	

or

800 m³/h	

Select night ventilation → Fan pressure → Enter value → *Esc*

	NL-07
Night ventilation	
Fan pressure	
	0000 Pa
ESC BACK ↵ SELECTION DISPLAY ⬍	

800 Pa	

or

800 m³/h	

Select peak ventilation → Fan, ventilation air/extract air → Enter value

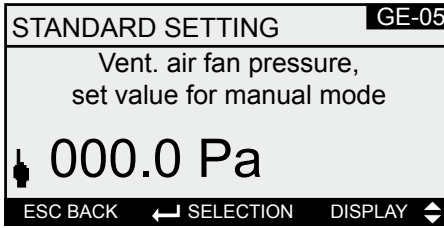|	SL-05
Peak ventilation	
Fan	
Ventilation air	0000 Pa
Extract air	0000 Pa
ESC BACK ↵ SELECTION DISPLAY ⬍	

800 Pa	

or

800 m³/h	

Hold down *Esc* until you jump to the standard screen

Entering a set value for manual mode

Standard screen → *Esc* → Standard settings → Select vent. air fan pressure, manual mode → Set value

```
STANDARD SETTING          GE-05
        Vent. air fan pressure,
        set value for manual mode

  ▪ 000.0 Pa

 ESC BACK   ↵ SELECTION   DISPLAY ⬍
```

Factory setting	Customer setting
000.0 Pa	

or

Factory setting	Customer setting
0 m³/h	

Select extr. air fan pressure, manual mode → Set value

```
STANDARD SETTING          GE-05
        Extr. air fan pressure,
        set value for manual mode

  ▪ 000.0 Pa

 ESC BACK   ↵ SELECTION   DISPLAY ⬍
```

Factory setting	Customer setting
000.0 Pa	

or
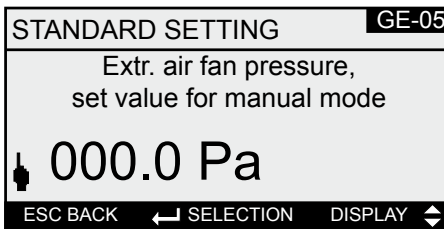
Factory setting	Customer setting
0 m³/h	

Select vent. air pressure for external demand → Set value

```
STANDARD SETTING          GE-12
 Vent. air pressure for
 external demand
        Stage 3:          0 Pa
        Stage 2:          0 Pa
        Stage 1:          0 Pa
 ESC BACK   ↵ SELECTION   DISPLAY ⬍
```

Factory setting	Customer setting
000.0 Pa	
000.0 Pa	
000.0 Pa	

or
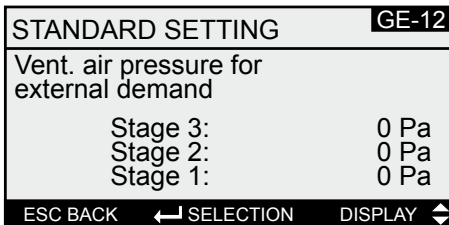
Factory setting	Customer setting
0 m³/h	
0 m³/h	
0 m³/h	

Select extr. air pressure for external demand → Set value

```
STANDARD SETTING          GE-12
 Extr. air pressure for
 external demand
        Stage 3:          0 Pa
        Stage 2:          0 Pa
        Stage 1:          0 Pa
 ESC BACK   ↵ SELECTION   DISPLAY ⬍
```

Factory setting	Customer setting
000.0 Pa	
000.0 Pa	
000.0 Pa	

or
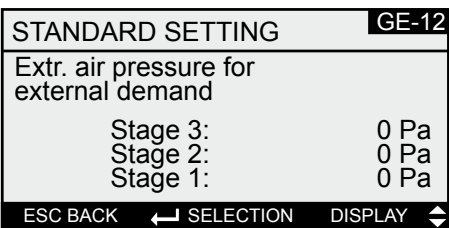
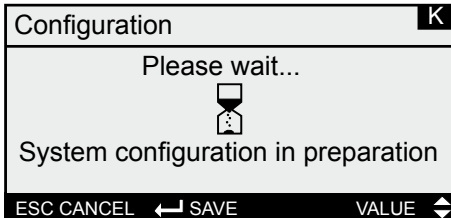| Factory setting	Customer setting
0 m³/h	
0 m³/h	
0 m³/h	

Hold down *Esc* until you jump to the standard screen

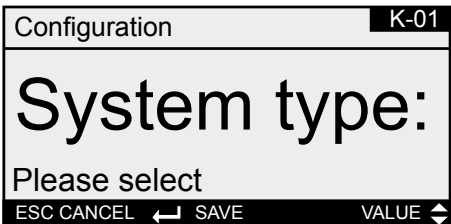**5. If commissioning is not carried out by Wolf, configuration must be carried out as follows.**
After connecting the controller to the power supply, system configuration is carried out first of all.
You are then prompted to configure the system according to function. The individual screens and the relevant selections should be worked through as follows.

NB	**The system configuration is preset by Wolf**
	The following should only be carried out if the controller is replaced

```
┌─────────────────────────────┐
│ Configuration            K  │
├─────────────────────────────┤
│        Please wait...       │
│            ⌛                │
│ System configuration in preparation │
├─────────────────────────────┤
│ ESC CANCEL  ↵ SAVE   VALUE ▲▼│
└─────────────────────────────┘
```
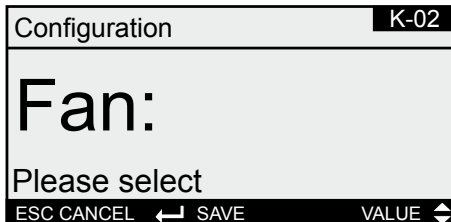
Operation (selection) is carried out with the arrow keys ↑↓, the selected function is confirmed with Enter ↵, and then the next menu is opened automatically.
You can return to a menu with *Esc* to change incorrect settings.

```
┌─────────────────────────────┐
│ Configuration         K-01  │
├─────────────────────────────┤
│                             │
│ System type:                │
│                             │
│ Please select               │
├─────────────────────────────┤
│ ESC CANCEL  ↵ SAVE   VALUE ▲▼│
└─────────────────────────────┘
```

The following selection is possible via arrow keys:
Ventilation air system
Vent./extr. air system
Confirm selected system type with Enter

Factory setting	Customer setting
Vent./extr. air system	

```
┌─────────────────────────────┐
│ Configuration         K-02  │
├─────────────────────────────┤
│                             │
│ Fan:                        │
│                             │
│ Please select               │
├─────────────────────────────┤
│ ESC CANCEL  ↵ SAVE   VALUE ▲▼│
└─────────────────────────────┘
```

Select fan speed:
Single stage
Two-stage
Three-stage
Variable
Pressure control
Flow rate control

Variable	

Selection for pressure / flow rate control

	Factory setting	Customer setting
	CKL 1300 electric heater bank variable	
	CKL 3000 DHW pump bank	

```
┌─────────────────────────────┐
│ Configuration          K-03 │
│                             │
│ Heating:                    │
│                             │
│ Please select               │
│ ESC CANCEL  ↵ SAVE   VALUE ⬍│
└─────────────────────────────┘
```

Select heating mode:
No heating
DHW pump bank
El heater bank stage 1
El heater bank stage 2
El heater bank stage 3
El heater bank stage 4
El heater bank stage 5
El heater bank var.
KGWO

	No cooling	

```
┌─────────────────────────────┐
│ Configuration          K-04 │
│                             │
│ Cooling:                    │
│                             │
│ Please select               │
│ ESC CANCEL  ↵ SAVE   VALUE ⬍│
└─────────────────────────────┘
```

Select cooling mode:
No cooling
Cold water pump bank
Direct evap. stage 1
Direct evap. stage 2

	Outs./dis. air dampers	

```
┌─────────────────────────────┐
│ Configuration          K-05 │
│                             │
│ Air dampers                 │
│                             │
│ Please select               │
│ ESC CANCEL  ↵ SAVE   VALUE ⬍│
└─────────────────────────────┘
```

Select air dampers:
No air dampers installed
Mixer air dampers
Mixer/vent/ex.air dmpr
Outs./dis. air dampers

	PHE	

```
┌─────────────────────────────┐
│ Configuration          K-06 │
│                             │
│ HR:                         │
│                             │
│ Please select               │
│ ESC CANCEL  ↵ SAVE   VALUE ⬍│
└─────────────────────────────┘
```

Select heat recovery system:
No HR available
PHE
RHE
CCS

WOLF

	Configuration	K-07
	Control type:	
	Please select	
	ESC CANCEL ↵ SAVE	VALUE ⬍

Select temperature control:
Vent. air control
Room vent. air cascade
Ext./vent. air cascade

Factory setting	Customer setting
Vent. air control	

	Configuration	K-08
	Filter:	
	Please select	
	ESC CANCEL ↵ SAVE	VALUE ⬍

Select filters:

No filter	Vent./extr. air filter
Outside air filter	Outside/extr. air filter
Ventilation air filter	Outs./vent/ex. air filter
Extract air filter	
Outs./vent. air filter	

Vent./extr. air filter	

	Configuration	K-09
	Number FD:	
	Please select	
	ESC CANCEL ↵ SAVE	VALUE ⬍

Select fire dampers:
No FD available
1 fire damper

1 fire damper	

	Factory setting	Customer setting
	None available	

```
Configuration                    K-10

Ext. demand:

Please select
ESC CANCEL  ⏎ SAVE       VALUE ⬍
```

Select external systems, demand:
None available
Remote start/stop
Remote step control
Remote On/Off + stages

None available	

```
Configuration                    K-11

Remote control

Please select
ESC CANCEL  ⏎ SAVE       VALUE ⬍
```

Select remote control:
None available
Set value transducer
Remote control

No BMS available	

```
Configuration                    K-12

BMS:

Please select
ESC CANCEL  ⏎ SAVE       VALUE ⬍
```

Select building management system:
No BMS available
pCO Manager
BacNet
LON Works
Nadbus

```
Configuration                    K-E0


   Pre-configuration completed


⏎ Continue with Enter
```

The selected configuration is then dis-
played in the overview
Changes cannot be made

Overview of the preset configuration

```
Configuration                    K-E1
Vent./ex. air syst. w/
variable speed fan
without heater bank
No cooling bank
Outs./dis. air dampers
↵ Continue with Enter
```

Continue with ↤

```
Configuration                    K-E2
Heat recovery PHE
Vent. air control
Outside/extr. air filter
1 fire damper
No ext. demand
↵ Continue with Enter
```

Continue with ↤

```
Configuration                    K-E3
Remote control
No BMS available



↵ Continue with Enter
```

Continue with ↤

```
Configuration                    K-E4

        Restart system
        (mains OFF/ON)


↵ Continue with Enter
```

Configuration complete
Switch control unit OFF and ON again
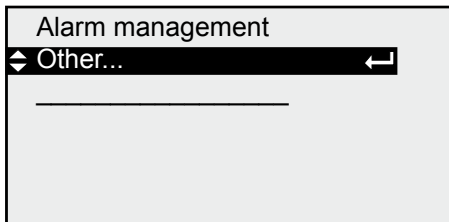The configuration is saved

6. Restoring factory settings
Delete all settings from the standard menu.
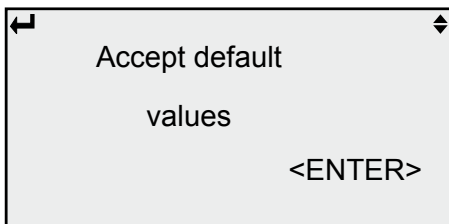(Delete preset configuration)
Please press **Prg** and *Esc* for approx. 2 sec and enter manufacturer password 4711. Confirm with *Esc*.

```
         Configuration

Manufacturer password

                    4711
```

Select Other with ↑↓ and confirm with
Enter ↵
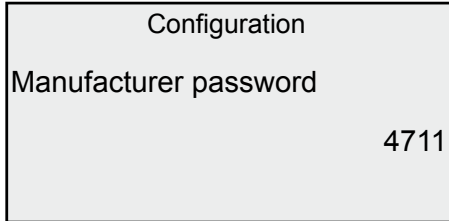
```
 Alarm management
⬍ Other...                    ↵
 _____
```

Select Accept default values ↑↓ and
confirm with Enter ↵

```
↵                            ⬍
      Accept default

      values
                   <ENTER>
```

After approx. 30 sec, the display jumps
automatically to the system configuration
level